

## REMARKS

In the Office Action mailed from the United States Patent and Trademark Office on October 21, 2003, the Examiner rejected claims 5 and 15 under 35 U.S.C. §103(a) as being unpatentable over Weingarden et al. (U.S. Patent No. 6,164,975, hereinafter “Weingarden”), and claims 1-4, 6-14 and 16-20 as being unpatentable over Weingarden in view of Luh (U.S. Patent No. 6,609,129, hereinafter “Luh”). Accordingly, Applicants respectfully provide the following:

### Rejection under 35 U.S.C. § 103 Over Weingarden

In the Office Action, the Examiner rejected claims 5 and 15 under 35 U.S.C. §103(a) as being unpatentable over Weingarden. Applicants respectfully submit that the claim set as provided herein is not made obvious by the cited reference.

An invention is unpatentable under Section 103 “if the differences between the subject matter sought to be patented over the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains.”

To establish a *prima facie* case of obviousness, three criteria must be met. “First, there must be some suggestion or motivation . . . to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.” MPEP § 2142.

Applicants respectfully submit that Weingarden does not teach or suggest all the limitations claimed. While both Weingarden and the present invention deal with education and technology, the focus of each is very different. Weingarden focuses on the instructional aspects

of education and how instructional systems can adapt to the learner (see Abstract), while the present invention focuses on the testing aspects of education, (see Specification, page 3, line 2) and how more relevant test questions can be generated more efficiently (see Specification, page 9, lines 20-23 and page 10, lines 1-3).

For instance, Weingarden says that “the system can adapt to the learner by updating the utility function through the use of preference relations which are determined through testing and which indicate which of the cognitive styles results in the greatest comprehension by the learner of the content contained within the presentation.” See Column 2, lines 11-16. Thus, while testing is used in Weingarden, testing is not the focus, nor are test questions created by the utility function based on the preference relations. Instead, in Weingarden the reverse is true, the preference relations are “determined through testing.” See Column 2, lines 13-14. This implies that the test questions used in Weingarden are exactly the type of questions the present invention does not want because they are not contextually relevant to the information associated with the index. Also, the utility function of the present invention does not change, as it does in Weingarden. See Weingarden, Column 2, lines 11-16.

In contrast, the present invention claims an “output device” that renders “an educational test question that is based on the relationship of one or more of the nodes” (see claim 1) and a method for “selectively providing one or more educational test questions, based on the relationship, that connect the first and second nodes.” (see claim 11) Thus, in contrast to Weingarden, the present invention creates test questions from the relationships, not vice versa.

Because Weingarden does not teach this limitation, Applicants respectfully submit that the prior art reference does not teach or suggest the limitations claimed. And, since the reference cited by the Examiner does not teach or suggest each and every limitation of the independent

claims, Applicant respectfully submits that the prior art references do not make obvious the claim set.

Rejection under 35 U.S.C. § 103 Over Weingarden in View of Luh

In the Office Action, the Examiner rejected claims 1-4, 6-14 and 16-20 under 35 U.S.C. §103(a) as being unpatentable over Weingarden in view of Luh. Applicants respectfully submit that the claim set as provided herein is not made obvious by the combination of the cited references because, as argued above, because neither Weingarden nor Luh nor the combination thereof teach or suggest all the limitations claimed. While both Weingarden and the present invention deal with education and technology, the focus of each is very different. Weingarden focuses on the instructional aspects of education and how instructional systems can adapt to the learner (see Abstract), while the present invention focuses on the testing aspects of education, (see Specification, page 3, line 2) and how more relevant test questions can be generated more efficiently (see Specification, page 9, lines 20-23 and page 10, lines 1-3).

For instance, Weingarden says that “the system can adapt to the learner by updating the utility function through the use of preference relations which are determined through testing and which indicate which of the cognitive styles results in the greatest comprehension by the learner of the content contained within the presentation.” See Column 2, lines 11-16. Thus, while testing is used in Weingarden, testing is not the focus, nor are test questions created by the utility function based on the preference relations. Instead, in Weingarden, the reverse is true, the preference relations are “determined through testing.” See Column 2, lines 13-14. This implies that the test questions used in Weingarden are exactly the type of questions the present invention does not want because they are not contextually relevant to the information associated with the

index. Also, the utility function of the present invention does not change, as it does in Weingarden.

In contrast, the present invention claims an “output device” that renders “an educational test question that is based on the relationship of one or more of the nodes” (see claim 1) and a method for “selectively providing one or more educational test questions, based on the relationship, that connect the first and second nodes.” (see claims 11, 20) Thus, in contrast to the combination of Weingarden and Luh, the present invention creates test questions from the relationships, not vice versa.

Because Weingarden and Luh do not teach this limitation, Applicants respectfully submit that the prior art reference does not teach or suggest the limitations claimed. Even when combined with Luh, this limitation is not found as Luh also does not claim either an “output device” that renders “an educational test question that is based on the relationship of one or more of the nodes” (see claim 1) or a method for “selectively providing one or more educational test questions, based on the relationship, that connect the first and second nodes.” (see claims 11, 20) Since the references cited by the Examiner, alone or combined, do not teach or suggest each and every limitation of the independent claims, Applicant respectfully submits that the prior art references do not make obvious the claim set.


Thus, Applicant respectfully submits that none of the claims provided herein are made obvious from the references cited by the Examiner.

CONCLUSION

Applicants submit that the amendments made herein do not add new matter and that the claims are now in condition for allowance. Accordingly, Applicants request favorable reconsideration. If the Examiner has any questions or concerns regarding this communication, the Examiner is invited to call the undersigned.

DATED this 21 day of January, 2004.

Respectfully submitted,

  
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